

Massachusetts Institute of Technology
Charles Stark Draper Laboratory

Luminary Memo 191

TO: Distribution
FROM: Harry McOuat
DATE: 4 January 1971
SUBJECT: Fixed memory hardware related constants in Luminary 1D.

Attached is a list of fixed hardware related constants in Luminary 1D (Luminary 178). This list was arrived at by first using a program to strip out all constants which might possibly be hardware related, and then performing a visual perusal of the resulting list and pertinent documentation (GSOP's, Flow Charts, etc.) to ascertain those constants which seem to be hardware related. The attached list has been reviewed by individuals in the various divisions of 23.

This list of constants may still be deficient in that there are many numbers which are hardware connected but are "insensitive" to the stripping process, such as the time lag programmed via TC FIXDELAY where the ΔT is associated with shaping the frequency response of a hardware loop.

It is likely that the list also contains many constants which are not needed but are included "just to be safe".

In the interest of improving this list for Luminary 1D and Luminary 1E, all comments are welcomed. Perhaps a set of rules should be generated for labeling constants go/no go so that this will become a normal fall out of program development rather than an "after the fact" collection.

Listing Nmemonic	Listing References	Listing Log Sect Definition	GSOP Reference	Flow Chart Numerical References Value	Source	Remark
FDPS	1 736	Controlled Constants	5. 3-23	#3800 (3) 4. 367 B-7		
MDOTDPS	1 819	"	5. 3-27	#3800 (3) 0. 1480 B-3		
DTDECAY	---	"	5. 3-27	#3800 (3) -38		
FAPS	2 740 758	"	5. 3-30	#3820 (2) 1. 5569 B-7		
MDOTAPS	---	"	5. 3-27	#3820 (2) 0. 05135 B-3		
ATDECAY	1 825	"	5. 3-132	#3820 (2) -18 #3950 (44)		
100PCTTO	1 819	"		#3970 (8) 24 B-17		
FRC34	2 738 756	"	5. 3-23	#3810 (2) . 17792 B-7		
FRCS2	1 738	"	5. 3-30	#3810 (2) . 08896 B-7		
K1VAL	1 756	"	5. 3-30	#3840 (21) 140. 12 B-23		
K2VAL	1 757	"	5. 3-30	#3840 (21) 31. 138 B-24		
K3VAL	1 757	"	5. 3-30	#3840 (21) 1. 5569 B-10		
S40. 136	1 757	"	5. 3-31	#3840 (21) . 4671 B-9		
S40. 136-	1 758	"	5. 3-31	#3840 (22) . 4671 B+1		
(1/DV)A	1 825	"	5. 3-132	#3950 (44) 15. 20 B-7		
K(1/DV)	1 819	"	5. 3-144	#3970 (7) 436. 7 B-9		
(AT)A	1 825	"	5. 3-132	#3950 (44) $3. 2883 \times 10^{-4}$ B9		
(TBUP)A	1 825	"	5. 3-132	#3950 (44) 91902 B-17		
AT/RCS	1 830	"	5. 3-147, 152	#3950 (18) . 0000785 B+10		

Listing Nmemonic	Listing References	Listing Log Sect Definition	GSOP References	Flow Chart References	Numerical Value	Source	Remark
APSVEX	3 740 847	Controlled Constants	5.3-27, 33	#3820 (2) #3950 (44)	-3030×10^{-2} B-5		
DPSVEX	2 736 819	"	5.3-27, 33	#3800 (3) #3970 (8)	-2.95588868×10^1 B-5		
RCSVEX					-27 B-5		
TRIMACCL	1 795	"	5.3-109	#3900 (18)	$3.50132708 \times 10^{-5}$ B+8		
THRESH1	1 735	"	5.3-44, 27	#3800 (3)	24		
THRESH3	1 735	"	5.3-44, 27	#3800 (3)	12		
HIRTHROT	1 743	"		#3840 (23)	BIT13		
THRESH2	3 740 823	"	5.3-44	#3820 (8) #3950 (2)	308		
ω FMAXODD	1 777	"	5.3-114	#3900 (38)	3841		
FMAXPOS	1 777	"	"	#3900 (38)	3467		
THROTLAG	1 779	"	"	#3900 (40)	8 cs.		
SCALEFAC	2 780 804	"	"	#3900 (41)	797.959872 B-16		
DPSTHRSH	1 768	"	5.3-27, 44	#3900 (2)	36		
LVELBIAS	1 563	"	5.3-81	#3600 (65)	-12288		
RDOTBIAS	1 565	"	5.2-60	#3600 (91)	17000		
RDOTCONV	1 579	"	5.2-59	#3600 (60)	-.0019135344 B+7		

Listing Nmemonic	Listing References	Listing Log Sect Definition	GSOP References	Flow Chart Numerical References Value	Source	Remark
RANGCONV	1 579	Controlled Constants	5. 2-59	#3600(60) 2. 859024 B-3		
HBEAMNB	1 869	"	5. 3-57, 7. 1, 85	#3935(13) - . 7147168647		
+2				- . 0731086602		
+4				- . 6955824372		
VZBEAMNB	1 872	"	"	#3935(22) - . 406736643		
+2				+ . 0954915028		
+4				+ . 90854096		
VYBEAMNB	---	"	"	#3935(22) 0		
+2				+ . 9945218954		
+4				- . 1045284632		
VXBEAMNB	---	"	"	#3935(22) + . 9135454576		
+2				+ . 0425155563		
+4				. 404505084971		
+6				- . 9374036070		
+8D				- . 0364014993		
+10D				- . 3463371311		
+12D				0		
+14D				. 1045284632		
+16D				. 9945218954		
+18D				0		

Listing Nnemonic	Listing References	Listing Log Sect Definition	GSOP References	Flow Chart References	Numerical Value	Source	Remark
+20D					.9945218954		
+22D					-.1045284632		
+24D					.9999999999		
+26D					0		
+28D					0		
HSCAL	1 869	Controlled Constants	5.5-81	#3935(13)	-.3288792		
VZSCAL	1 872	"	"	#3935(22)	.5410829105		
VYSCAL	---	"	"	#3935(22)	.7565672446		
VXSCAL	---	"	"	#3935(22)	-.402004377		
KPIP	1 847	"		#3850(9)	.0512		
KPIP1	4 802 865	"		#3850(18)	.0128		
KPIP2	1 867	"		#3850(15)	.0064		
LANAKPIP	3 879	"		#3930(14)	.0512		
MAXVEL	2 882 883	"		#3930(14)	198.645 B-5 m/cs		
MAXDBITS	2 883	"		#3930(14)	300 f/s		
VELCONV	2 883	"	5.3-118	#3930(15)	.03594		
ALTRCONV	1 881	"	"	#3930(14)	.16020		

Listing Nmemonic	Listing References	Listing Log Sect Definition	GSOP Reference	Flow Chart Numerical References Value	Source	Remark
GEORGES	2 390 391				. 63661977	
GEORGEK					. 59737013	
SINGIMLC	1 487	R60, 62		#3420(7)	. 4285836003	
SINVEC1	1 488			#3420(7)	. 3796356537	
SINVEC2	"			"	. 2462117800	
VECANG1	"			#3420(8)	. 1388888889	
VECANG2	"			"	. 0972222222	
1500DEC	2 506 514	P20-P25	5. 2-36	#3600(19)	1500	
250DEC	2 505	"	"	#3600(18)	250	
MAXTRIES	2 516 517	"	5. 2-41	#3600(84)	60	
500DEC	1 503	"		#3600(98)	500	
60SCNDS	1 510	"	5. 2-41	#3620(4)	6000	
TENSEC	1 517	"	5. 2-76	#3600(84)	1000 B-28	
HALFSEC	1 516	"	5. 2-42	#3600(31)	50	
COS15DEG	1 525	"	5. 2-78	#3600(25)	. 96593 B-1	
DEC-. 30555		"	5. 2-44	#3600(29)	-. 30555	
-. 35833		P20-P25	5. 2-44	#3600(29)	-. 35833	
-. 31667		"	"	#3600(29)	-. 31667	
-. 69444		"	"	"	-. 69444	
5. 5DEGS	2 530 531	"	"	"	. 03056	
85DEGS	1 530	"	"	"	. 45556	

Listing Nmemonic	Listing References	Listing Log Sect Definition	GSOP Reference	Flow Chart Numerical References Value	Source	Remarks
DEC100		"		100		
DEC 2		"		2		
DEC1000		"		1000		
DEC-. 5		"		-. 5		
-45DEGSR	1 538	"	5. 2-44	#3600(45)	OCT 70000	
-50DEGSR	1 539	"	"	"	-. 27778	
-80DEGSR	1 539	"	"	"	-. 44444	
DEC50		"		#3600(47)	50	
DEC-. 00555		"		"	-. 00555	
RRSPGAIN	1 541	"		"	. 59062	
-RRLIMIT	2 543	"		#3600(48)	-384	
MAXTRY5	1 550	"		#3600(32)	60	
DEC-. 30555		P20-P25		#3600(34)	-0. 30555	
DEC-. 35833		"		"	-0. 35833	
20. 5DEGS	1 551	"		"	. 11389	
DEC50		"		#3600(39)	50	
ROESGAIN	2 557	"		#3600(41)	. 53624	
COS1/2DEG	1 557	"	5. 2-42	#3600(42)	. 999961923 B-2	
MCTOMS	2 555 558	"		#3600(43)	100 B-13	
90MSCALE	1 568	"			OCT 440	
-DTSCALR	1 569	"			OCT 77754	

Listing Nnemonic	Listing References	Listing Log Sect Definition	GSOP Reference	Flow Chart Numerical References Value	Source	Remarks
DEC100		"				
6SECS	1 573	"	5.2-52, 78	600		
FHNM	1 575	"	5.2-36	#3600(16)	740800	B-20
THREEDEG	1 580	"	5.2-56	#3600(61)	.008333333	
30DEG	1 581	"	5.2-56	#3600(56)	.083333333	
IMUVAR	2 590 591	"	5.2-68	#3600(78)	E-6	B12
WSIZE	1 593	"		#3600(81)	161	
SIN60DEG	2 598	"	5.2-51	#3600(51)	.86603	
COS60DEGS	2 598	P20-P25	5.2-51	#3600(51)	0.5	
OFFSTFAC	1 598	"	"	"	0.05678	
3SECONDS	1 777	"			300	
6SECONDS	2 758	"	5.2-52, 78	#3600(49)	600	
1.5SECS	1 597	"	5.2-51	#3600(50)	150	
-FOURDT	1 754	P40-P47	5.3-31	#3810(9)	-800	
FOURSECS	1 754	"	"	"	400	
1SEC20	1 757	"	"	#3840(21)	100	
3.5SEC	1 757	"	"	"	350	
5SEC	2 717 719	"	"	"	500	
6SEC	2 759	"	"	#3840(22)	600	
89SECS	1 759	"	"	"	8900	
6.5SECS	1 756	"		"	650	

Listing Nmemonic	Listing References	Listing Log Sect Definition	GSOP References	Flow Chart References	Numerical Value	Source	Remark
DEC6000							
GUIDBURN	1 769	Lunar Land	5.3-106	#3900(3)	66440		
HCROFF	2 769 860	"	5.3-60	"	15.24		
FEXTRA	1 777	Throt. Cntl.	5.3-114	#3900(39)			
/AF/CNST	1 776	"	"	"	.13107		
4MAXNOM	1 776	"	"	"	14908		
SHFTFACT	1 804	Lunar Land Guidance		#3900(32)	1		
RIMUZ	1 805	"		#3900(35)	99.486		
±ELBIT	1 807	"	5.3-100		NA		
±AZBIT	1 806	"			NA		
ALL4BITS	2 805 806	"			NA		
AZEACH	2 806	"			.01746		
ELEACH	2 807	"			.01746		
-DEC102	1 811	"		#3900(34)	-103		
P64DB	1 785	"		#3900(7)	OCT 00155		
+DEC99	1 811	"		#3900(34)	99		
TREDESCL	1 811	"	5.3-86	"	-.08		
180DEGS	1 790	"		#3900(11)	180		
1/2DEG	1 790	"		"	.00278		
PPOSMAX	1 795	"	5.3-81	#3900(25)	.42262		
PPOSMIN	1 795	"	5.3-81	"	.25882		

Listing Nmemonic	Listing References	Listing Log Sect Definition	GSOP Reference	Flow Chart Numerical References Value	Source	Remark
HIGHESTF	1 792	Lunar Land Guidance		#3900(14)	4.34546769	
GSCALE	2 792 803	"	5.3-111	"	100	
DEPPCPIT	2 788	"	5.3-110	#3900(10)	-.02	
10SECS	1 835	P70-P71	5.3-154	#3950(30)	1000	
HINJECT	1 826	"	5.3-135	(3950(45)	18288	
(TGO)A	1 823	"	5.3-135	#3950(5)	37000	
K(AT)	1 819	"	5.3-136	#3970(8)	.02	
49FPS	1 824	P12	5.3-136	"	.149352	
VINJNOM	1 824	"	"	#3950(7)	16.7924	
RDOTDNOM	1 824	"	"	"	.059436	
BIT3H	1 827	P12		#3950(13)	OCT 00004	
40FPS	1 836	"	5.3-154	(3950(29)	.12192 B-7	
4SEC(17)	1 831	"		#3950(19)	400 B-17	
2SEC(17)	1 841	"			200 B-17	
T3	1 831	"		#3950 (21)	1000 B-17	
6SEC (18)	1 827	"		#3950 (13)	600 B-18	
2SEC(9)	1 827	"		"	200 B-9	
PRLIMIT	2 832	"		#3950(23)	-.0639	
MINABDV	1 827	"		#3950 (12)	.0356 B-5	

Listing Nmemonic	Listing References	Listing Log Sect Definition	GSOP Reference	Flow Chart Numerical References Value	Source	Remark
1.75SEC	1 844	SERVICER	5.3-69	#3850(4)	175	
OCT 37771	1 844	"		#3850(3)	OCT 37771	
EIGHTEEN	1 854	"		#3850(8)	18	
GSCNE1	1 862	"		#3850(17)	100 B-16	
BIASFACT	1 859	"		#3850(8)	.01 B-10	
DP1/20	1 865	"		#3850(18)	.05	
1-30KFT	1 860	"		#3935(19)	16768072 B-24	
GAINFLTR	1 9009	FINDCDUW	5.3-160	#3960(23)	DEC .2 DEC .1	
DUNFVLIM	"	"	5.3-165	"	.007 B-1	
UNFULIM	"	"	"	#3960(24)	.129 B-1	
DOTSWFMX	"	"	5.3-167	#3960(26)	.93302 B-4	
DAXMAX	2 897 906	"	5.3-170	#3960(16)	.1111111111 .0111111111	
DAY/2MAX	"	"	"	"	.0555555555 .0055555555	
DAZMAX	1 897	"	"	#3960(15)	=DAXMAX	
CDUZDLIM	1 894	"	"	#3960(12)	.3888888888	
DELERLIM	1 899	"	5.3-173	#3960(11)	0.0555555555 0.0055555555	
CSS5	2 916 917	P51-P53	5.6-57, 58	#3510(31)	.2490475	
CSSUN	1 917	"		#3510(33)	.125	
SDEBPAAS	2 917 951	"		#3510(31)	.01388889	
CSS40	1 919	"		#3510(36)	.16070	

Listing Nmemonic	Listing References	Listing Log Sect Definition	GSOP Reference	Flow Chart Numerical References Value	Source	Remark
CSS33	2 919	"		#3510(35) .16070		
TS/6HT1	1 922	"		#3510(23) 3600		
DEGPRR1	1 928	"	5.6-6	#3510(10) 46		
DEG359	1 928	P51-P53	5.6-6	" 16338		
DEG30	2 255 939	"	5.6-41	#3520(28) .083333333		
DEG. 5	1 939	"	"	#3520(29) .00138888		
42DEG	1 944	"	5.6-49	#3520(11) OCT 07357		
35DEG	1 944	"	"	" OCT 06211		
.166...	1 1231	Inflite Align		#3310(6) .1666666667		
DEC150		IMU Switch		150		
-6YBOMIN	2 1301 1304	"		#3320(27) OCT -176		
6YROFRAC	"	"		" .251 B-21		
NAPROWDR	1 1385	DAP Interface		#3440(18) OCT 00155		
WIDEDB	1 1385			" OCT 03434		
POWRDB	"			" .02222		

Listing Nmemonic	Listing References	Listing Log Sect Definition	GSOP Reference	Flow Chart Numerical References Value	Source	Remark
MS100	2 1390 1399	DAPIDLER	3. 6-4	#3440(16)	37766 ₈	
DACLIMIT	3 1397	"		#3440(27)	-3848 16000 ₈ 3848	
ONETENTH	1 1397	"		"	03146 ₈	
-OCT630	1 1400	P-Axis RCS		#3440(36)	77147 ₈	
KAOS		"			60 ₁₀	
1/10SEC		"			00001	
40CYC	1 1413	"		#3470(29)	50 ₈	
-160MSTG	1 1417	"		#3470(39)	-256 ₁₀	
-FOURDEG	"	"		#3470(38)	-.08888 ₁₀	
+150MSTG	1 1415	"		#3470(41)	240 ₁₀	
NORMSCL		"			266 ₈	
-100MS	2 1448	"	3. 4-22	#3470(5)	-0.1 ₁₀	
200MS	2 1405	"	"	#3470(17)	0.2 ₁₀	
25/32	1 1414	"		#3470(33)	0.78125 ₁₀	
1/40	4 1401 1403	"		#3470(7)	0.025 ₁₀	
MINTIMES	1 1415	"		#3470(41)	-22 ₁₀ +22 ₁₀	
60MS	2 1423	Q, R Axis-RCS		#3470(58)	140 ₈	
14 MS	6 1423	"		#3470(56)	22 ₁₀	
40CYCL	1 1426	"		#3470(52)	50 ₈	
LINRAT	2 1424	"		#3470(51)	46 ₁₀	

Listing Nnemonic	Listing References	Listing Log Sect Definition	GSOE Reference	Flow Chart Numerical References Value	Source	Remark
-150MS	1 1431	Q, R Axis-RCS		#3470(64) -240 ₁₀		
SCLNOPM		"		266 ₈		
SENSOR	2 1439	TSETLAW		#3470(86) 14400 ₈		
-3DEG	1 1440	"	3.4-20	#3470(88) -0.06667 ₁₀		
-.0112A8	1 1442	"		#3479(99) -0.00141 ₁₀		
.1AT4	1 1443	"		" 0.025 ₁₀		
.1AT2	1 1445	"		#3470(94) 0.05 ₁₀		
.0375AT4	1 1445	"		" 0.00938 ₁₀		
-.025AT2	1 1445	"		" -0.0125 ₁₀		
-.025AT4	1 1443	"		" -0.00625 ₁₀		
-0.5AT2	1 1442	"	3.4-15	#3470(99) -0.025 ₁₀		
-.75AT2	1 1442	"	"	" -0.075		
.00375A8	1 1443	TSETLAW		#3470(99) .00375 ₁₀		
-TJMAX	1 1442	"		#3470(97) -.0375 ₁₀		
TSMIN	"	"		#3470(99) .005 ₁₀		
RUFPAE	1 1443	"	3.4-6.11	#3470(100) .1444 ₁₀		
-100MSTB	3 1448	KALMAN		#3470(5) -160 ₁₀		
NFG1/J	2 1453	Trim Gimbal Control		#3480(6) -.33333 ₁₀		
OCT2J146	1 1457	"	3.5-4	#3480(14) 23146 ₈		
OCT00240	1 1457	"	"	#3480(15) 240 ₈		
OCT11276	1 1460	"		#3480(12) 11276 ₈		

Listing Nmemonic	Listing References	Listing Log Sect Definition	GSOP Reference	Flow Chart References	Numerical Value	Source	Remark
INERCONA	1 1466	AOSTASK	3. 3-3	#3490(5)	.0410511917		
+1					.0059347674		
+2					.0014979264		
+3					.0010451889		
+4					.0065443852		
+5					.0035784354		
+6					.0056946631		
+7					.155044		
+8					-.025233		
INTERCONB	1 1466	"	"	"	.002989 ₁₀		
INERCONC	1 1466	"	"	"	.002989		
+1					.008721		
+2					.018791		
+3					-.068163		
+4					.021345		
+5					-.066027		
+6					.000032		
+7					-.006923		
+8					.162862		
+9					.002588		
+10					.009312		
+12					-.023608		

Listing Nmemonic	Listing References	Listing Log Sect Definition	GSOP Reference	Flow Chart Numerical References Value	Source	Remark
DGBF	2 1468	AOSTASK	3.3-7	#3490(12) 0.610		
0.35356	2 1466	"	3.4-5	#3490(7) 0.35356 ₁₀		
1.7071	2 1466 1473	"	"	" .70711 ₁₀		
-EPSMAX	4 1466 1467	"	"	" -.42265 ₁₀		
TOPQCONS	1 1473	"	3.3-7	#3490(10) .51433 ₁₀		
IJACCON	"	"	"	#3490(9) 1678		
COEFF	4 1472 1473	"	3.3-9	" .19518		
+1						-.00529
+2						-.17670
+3						-.03709
+4						.06974
+6						.02569
+7						.20096
+8						.13564
+9						.75704
+10						-.37142
+11						-.63117
+12						.41179
ZONE3MAX	1 1475	"	3.4-8.15	#3490(15) .004375 ₁₀		
FLATVAL		"	"	" .01778 ₁₀		
-.03R/S2	6 1476 1483	"		#3490(17) 77377 ₈		
.023R/S2	1 1478	"		#3490(29) 356 ₈		

Listing Nmemonic	Listing References	Listing Log Sect Definition	GSO Reference	Flow Chart Reference	Numerical Value	Source	Remark
1/.03		AOSTASK	3.4-8.15	#3490(29)	37777 ₈		
RATELIM2	2 1488	SPS BACKUP		#3470(81)	632 ₈		
UTIME	1 1486			#3470(84)	12 ₈		
RATELIM1	1 1487			#3470(80)	32 ₈		
RATEDB1	1 1487			#3470(85)	45 ₈		
					<u>Octal</u>		
ALTCONV	2 882	Controlled Constants	5.3-118 5.2-60	#3930(14)	26305		
TORKJET1	2 1468	"			01150		
FULLAPS	1 216	"		#3010(5)	02357		
MINLMP	1 298	"		#3440(9)	76466		
MINMINLM	1 298	"		"	76731		
MINCSM	1 298	"		"	02000		
LOASCENT	1 1465	"	3.6-8	#3490(4)	01046		
HIDESCNT	1 1465	"	"	#3490(11)	10117		
LODESCNT	1 1465	"	"	"	00666		
HIASCENT	4 216 1465	"		"	not fixed memory		
-70DEGS	1 173	T4RUPT		#3210(53)	63434		
-15DEGS	1 173	"		"	75252		
90SECS	2 168	"		#3210(42)	21450		
20SEC	213	AGS Initial	5.6-68	#3250(3)	03720		
AGSRND1	213	"		#3250(4)	00000 60000		

Listing Nmemonic	Listing References	Listing Log Sect Definition	GSOP Reference	Flow Chart Reference	Numerical Value	Source	Remark
AGSRND2					00000 37777		
ABOUTONE	255	AOT MARK		#3530(16)	37777		
DP1/12	255	"		"	02525 12525		
1SEC+1	2 279 281	Extended Verbs		#3280(2)	00145		
250MS+1	1 281	"		"	00032		
ATTSCALE	1 285	"		03146	03146		
NORMAL	1 297	"		#3440(7)	25101		
FINE	1 297	"		"	05220		
1/10	"	"		#3440(8)	03146		
-0. 6D/S	"	"		#3440(7)	77445		
-0. 3D/S	"	"		#3440(8)	77622		
MINANG	1 355	Att. Manu. Routine		#3430(2)	00013 13563		
MAXANG	"			"	17070 34343		
LOCKANGL	1 354			"	14344		
ARATE	3 367	Gimbal Lock Avoidance		#3430(9)	00221 24255 00554 02660 02660 13301 16161 30707		
ANGLTIME	1 367	"		"	00003 04000		
DT/TAU	1 368	KALCMANU		#3430(11)	03146		
ONESEC	3 369 370	"		#3430(10)	00000 00144		

Listing Nnemonic	Listing References	Listing Log Sect Definition	GSOP Reference	Flow Chart Reference	Numerical Value	Source	Remark
BIASCALE	1 370	KALCMANU		#3430(10)	75777		
3990DEC	1 379	IMU Pecf. test #2			07626		
DEC58	1 378				00072		
1SECX					00144		
DEC585	1 379	IMU Perf. Test #4			06200		
SOUPLY					35730 00035 10317 17550		
77DECML	1 386				00115		
PIPASC	1 388				04133 02265		
VELSC	1 388				57223 66451		
ALSK	1 389				05427 12577 77567 44202		
OCT 770000	1 178	T4RUPT			77000		
OCT 740	1 179				00740		
BIT11 (VARDELAY)	34	"		#3210(43)	02000		
BIT6 (WAITLIST)	64	"			00040		
4SECS	3 169 779	"		#3210(44)	00620		
SIX	34	"		#3210(54)	00006		